DIVING INDUSTRY

228 464 There is little to report on this subject. Under present conditions it seems probable that in a few years the diving Nakhudas will find that it is impossible to obtain any recruits for diving in Bahrain. During the season only 12 boats went out to the banks from Bahrain and most of the divers who were engaged were from Persia and the Trucial Coast. So much money can be earned on shore that few men are willing to leave their shore jobs in order to dive during the summer months.

651 439 228 The tax on imported pearls imposed by the Government of India was in force throughout and after the diving season and this contributed to a large extent to the slackness in the pearl trade. Taking into consideration the small number of boats employed in diving the catch was moderately good and pearl prices were not much lower than in the previous season.

MEDICAL DEPARTMENT

1372

(Report by Dr. R. H. B. Snow, M.B.E., Senior Medical Officer)

Summary of the Year

185 751 A change is gradually infiltrating and making itself evident in the scope and policy of medical work which is increasing in every department and subconsciously affecting the life of the Island. Traditions are now being established which the new generation are growing up with, and health ideas which once were revolutionary are now accepted as the normal course of reasonable upbringing.

657 The medical department which started in a small way, and expanded slowly is seeing results which are very satisfying but which are taken for granted, although they took years of striving to achieve. From its small beginnings and tiny nucleus of key staff it has now spread out from something rather personal to more of a departmental outlook. This in the course of things is bound to be, but its danger is that lack of co-ordination may develop or that the department may absorb the individual expression. At present there seems to be no signs of this because the various heads of departments meet together continually to exchange ideas and align themselves in a common policy, and also they are readily accessible to the public.

743 758 Lines of expansion have shown themselves everywhere. The surgical work has been given great impetus by the advent of an F.R.C.S. specialist, Mr. R. D. Wilkins.

The operation theatre now runs a staff rota for every 24 hours of the day, made possible by recruiting Sister Ford and Sister Johnson from England. Sister Edwards was appointed to the Nursing Home to replace Sister Millson. The X-Ray department has an English Radiographer in charge—Mr. Havey. The Laboratory has a staff of six technicians. Four new Indian doctors arrived, one lady doctor for the Women's Hospital, and the others, male, were appointed to the Boys' Schools, The Port, and the Hospital. Mr. Burgin replaced Mr. Hanvey as Public Health Inspector, and Mr. Nambiar became the new Anti-Malaria Supervisor. Both hospitals recruited many more Indian trained nurses. The lack of sufficient staff has now been made good and at present meets all needs which recently have been very pressing. It meant also that more specialised apparatus could be installed being safely handled by expert hands. Such things include a more powerful X-Ray plant, a modern anaesthetic apparatus to administer all gases and curare, an electro-cautery unit and an electro-cardiograph.

The Geneva T.B. project for Bahrain very unfortunately was cancelled owing to changes of policy and financial aid in the World Health Organisation. This severely dislocated the programme to meet this problem. However, a modified scheme has been evolved making use of the ideas of Geneva and London and will be launched next year when in-patient accommodation will be considerably increased. The number of patients seen this year and treated were 275 men and 87 women. Many were foreigners and returned to their countries. Ninety were admitted and a few promising patients sent to Miraj Sanatorium. It is very satisfactory to report that those treated in Bahrain are showing greater improvement than in the past due to better drugs and surgery. A few have been in hospital for two years. 743 758

The Bahrain Medical Society had a good year of meetings and the annual Persian Gulf conference at Kuwait was well attended from Bahrain and again proved most worth while. The co-operation of doctors and hospitals up and down the Persian Gulf is a noteworthy feature not only on account of valuable mutual aid, but of interchange of knowledge on problems common to all. This also applies to medical officers of the R.A.F. and Royal Navy. 759

The hot weather was of average intensity with no heat exhaustion cases except from ships and these numbered 36 with 2 deaths. This has been causing considerable concern among all medical officers in the Gulf dealing with ships who report similarly, and as this department admits many to hospital it has now assumed some importance here. Certain shipping lines provide adequate facilities, and others do not, among which are certain British ships. The matter was taken up in a personal interview with the Chief Medical Officer, Port of London, where it was found that air conditioning might be considered but has not come into force yet. One air conditioned emergency room on each ship would greatly solve the problem and this is a matter needing prior attention. 758 743

The health of the Islands for the year was again well maintained with no epidemics or serious outbreaks of disease. 164

Miss W. E. Millson. Sister-in-Charge Nursing Home and Operating Theatre. DDO

It was with great regret that we accepted the resignation of Sister Millson who left to go to New Zealand in June 1953.

She had completed six and a half years of service in three contracts and been the first British Sister for this post.

By sheer hard work and selfless service she tackled these exacting dual duties with great determination and was not daunted by insufficient staff and ever increasing work.

She made a wonderful success of it, and her work will not be forgotten.

majority are believed to have been acquired elsewhere. Cases of ancylostomiasis and schistosomiasis are occasionally observed, primarily among non-Bahrainis, yet no indigenous foci of infection are known to exist.

Diseases Spread Chiefly Through the Respiratory Tract

Tuberculosis. Tuberculosis is widespread, but little precise information is available regarding its prevalence in the local population. The disease is believed to be extensive in Arabia, particularly among the Bedouin. In Bahrain, the migration of workers to and from the mainland, overcrowding and the generally low standards of personal hygiene are regarded as factors influencing the spread of the infection. The facilities for diagnosis and treatment are inadequate. The government operates a 13-bed tuberculosis sanatorium and provides treatment for tuberculous cases in its regular hospitals and dispensaries. It also subsidizes the transportation of certain cases to India for treatment, since many individuals do not respond favorably under the climatic conditions prevailing in Bahrain. About 220 to 350 cases were under observation in government institutions annually from November, 1948, to November, 1950. Pulmonary tuberculosis predominates, but a high rate of nonpulmonary infections also is encountered.

Smallpox. Bahrain is especially vulnerable to the introduction of smallpox from the neighboring Persian Gulf territories, Pakistan and India, and outbreaks are recorded at frequent intervals. Large-scale epidemics were reported in 1941-42 and in 1948-50, with sporadic cases in the intervening years. The most recent epidemic started in December, 1948, in the Hora section of Manama, and spread in a series of localized outbreaks, persisting into 1950. Eighty-six cases were transferred to the quarantine hospital in 1949, and about one third of that number the following year. The percentage of unrecognized infections

other eye diseases. Trachoma is widely distributed, and estimates of prevalence range from 35 to 90 per cent, depending upon the locality. Trichiasis is frequent. The most serious effects are often observed among immigrants from Saudi Arabia, the Trucial Coast and Iran. In an average of over 1,200 men patients receiving medical or surgical ophthalmic treatment in the government hospital in each of the two years 1949-50, about 30 per cent were suffering from trichiasis. Special attention is given to the treatment of eye diseases in all the hospitals and dispensaries, and clinics are conducted in some of the boys' schools. 164 515 136 164 758

Diseases of the Skin. Mycotic infections of the skin are common, but the children appear to be relatively free from favus. In spite of the low standards of hygiene among the poorer inhabitants, scabies is seldom seen. 164 515

Leprosy. Although leprosy is present among the Baharna, it is rare in the Arab community. Cases are found on all the islands, probably with greatest frequency on Sitra. The severity of the infection seems to be decreasing, and the percentage of childhood cases in recent years has been low. The actual number of lepers in the indigenous population is uncertain: it was believed to be about 100 in 1951. No segregation is practiced, but lepers are forbidden to congregate and beg in the towns. 164

Other Infections. Sporadic cases of tetanus and of tetanus neonatorum occur occasionally. Rabies is not recorded at present.

Diseases Spread by Arthropods

Malaria. Malaria was formerly one of the foremost disease hazards in Bahrain, but in recent years its importance has declined progressively with the expansion of the anopheline control program. The present morbidity is believed to be insignificant in comparison with that encountered before the inauguration of the government's antimalaria campaign in 1939. Treatment statistics are of doubtful value, yet they are 164 744 164 758

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164 758 useful in portraying the persistence of the disease. Records for 1949-50 indicate that between 1,700 and 2,000 persons were treated annually for malaria in the government hospitals and dispensaries alone.

164 There are normally two seasons of transmission—from the middle of March through June, with a peak early in June, and from the middle of September to the middle of January, with a peak in November. When climatic conditions are exceptionally favorable for anopheline breeding, however, transmission may take place throughout the year, with a minimum of activity in the winter months.

Because of its location on the edge of the date garden belt, Manama has always been highly malarious. As the result of control operations, the degree of infection has lately been reduced to a low level in the town, but up to 1950 it was still extensive on the outskirts. In limited malaria surveys made in January and again in May and June, which were reported in 1938,[1] the spleen rate among 234 boys of 4 to 14 years of age examined in Manama averaged about 39 per cent, while the corresponding rate among 137 boys in Muharraq was 13 per cent. The parasite indices in January were calculated at about 22 per cent in Manama and 6 per cent in Muharraq.

136 164 [167] In general, *Plasmodium vivax* infections predominate in June and *P. falciparum* in November. In the opinion of some local medical authorities, the prevalence of *P. falciparum* was enhanced by the mobility of military and civilian personnel in this region during the war years 1939-45, but it is now diminishing. In 249 blood films prepared in January in connection with the above investigation, malaria parasites were detected in 34; *P. falciparum*, in 10; *P. vivax*, in 13; and *P. malariae*, in 10; while one showed both *P. falciparum* and *P. malariae*. *Anopheles stephensi* is considered to be the principal vector, but *A. culicifacies* is probably implicated to some extent in certain localities.

164 **Plague.** Severe outbreaks of plague have

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